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| 34610<br>KED & ASSOC     | 7590 09/18/200<br>CIATES, LLP | EXAMINER             |                      |                  |
| P.O. Box 221200          |                               |                      | WENDMAGEGN, GIRUMSEW |                  |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|  | Application No.   | Applicant(s)   |
|--|---|--|
|  | 10/813,113  | YIM, KYEONG SU   |
| Office Action Summary  | Examiner  | Art Unit   |
|  | GIRUMSEW WENDMAGEGN   | 2621   |
| The MAILING DATE of this communication ap<br>Period for Reply  | pears on the cover sheet with the c   | correspondence address   |
| A SHORTENED STATUTORY PERIOD FOR REPL<br>WHICHEVER IS LONGER, FROM THE MAILING I<br>- Extensions of time may be available under the provisions of 37 CFR 1<br>after SIX (6) MONTHS from the mailing date of this communication.<br>- If NO period for reply is specified above, the maximum statutory period<br>- Failure to reply within the set or extended period for reply will, by statu<br>Any reply received by the Office later than three months after the maili<br>earned patent term adjustment. See 37 CFR 1.704(b). | DATE OF THIS COMMUNICATION  .136(a). In no event, however, may a reply be tind  d will apply and will expire SIX (6) MONTHS from te, cause the application to become ABANDONE   | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). |
| Status   |   |  |
| 1)☐ Responsive to communication(s) filed on <u>02</u> .  2a)☑ This action is <b>FINAL</b> . 2b)☑ This action is application is in condition for allowed closed in accordance with the practice under   | is action is non-final.<br>ance except for formal matters, pro  |  |
| Disposition of Claims  |   |  |
| 4)  Claim(s) 1-43 is/are pending in the application 4a) Of the above claim(s) is/are withdra 5)  Claim(s) is/are allowed. 6)  Claim(s) 1-43 is/are rejected. 7)  Claim(s) is/are objected to. 8)  Claim(s) are subject to restriction and/ Application Papers 9)  The specification is objected to by the Examin   | awn from consideration.   |  |
| 10) The drawing(s) filed on is/are: a) ac Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct  11) The oath or declaration is objected to by the E  | ccepted or b) objected to by the lead of a common or objected to by the lead of a common or objected to by the lead of the drawing of the lead of the | e 37 CFR 1.85(a).<br>jected to. See 37 CFR 1.121(d).                       |
| Priority under 35 U.S.C. § 119   |   |  |
| 12) Acknowledgment is made of a claim for foreig a) All b) Some * c) None of:  1. Certified copies of the priority documer 2. Certified copies of the priority documer 3. Copies of the certified copies of the priority application from the International Burea * See the attached detailed Office action for a list   | nts have been received.<br>nts have been received in Applicati<br>ority documents have been receive<br>au (PCT Rule 17.2(a)).   | on No<br>ed in this National Stage   |
| Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 6/4/08.   | 4)  Interview Summary Paper No(s)/Mail Da 5)  Notice of Informal F 6)  Other:   | ate  |

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## **DETAILED ACTION**

## Response to Arguments

Applicant's arguments filed 06/04/2008 have been fully considered but they are not persuasive.

-On page 18 applicant argues that Kunii does not disclose or suggest at lest the features of "transmitting a reservation recording information from the mobile terminal to a recording apparatus based on a reservation-recording key of the mobile terminal device to perform power management of the recording apparatus and a reservation-recording in the recording apparatus based on the reservation-recording information". However examiner respectfully disagrees. Paragraph 0257 Kunii discloses transmitting user selected TV programs information (reservation recording information) to make unattended recording (reservation recording) based on send button 363 (reservation-recording key) of the PDA (mobile terminal device). It known in the art managing power of recording apparatus based on reservation-recording information by turning on the apparatus and off when finished recording.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim1-13, 15-29, 34-38 is rejected under 35 U.S.C. 102(b) as being anticipated by Kunii et al (Pub No US 2002/0122080).

Regarding claim34, Kunii et al (hereinafter Kunii) anticipated a method for reservation-recording a broadcasting program, the method comprising: storing broadcasting program information in a mobile terminal (see paragraph 0127); and transmitting a reservation-recording information from the mobile terminal to a recording apparatus based on a reservation-recording key of the mobile terminal to perform power management of the recording apparatus and a reservation-recording in the recording apparatus based on the reservation-recording information (see paragraph 0257).

Regarding claim35, Kunii anticipates a method for reservation-recording a broadcast program using a mobile terminal, the method comprising: searching broadcasting program information in a mobile terminal (see paragraph 0127); and transmitting a reservation-recording information with a subscriber's IP address in a transmission packet form to perform power management of the recording apparatus and a reservation-recording the recording apparatus based on the reservation-recording information (see paragraph 0257).

Regarding claim36, Kunii anticipates recording apparatus, comprising: a receiver configured to receive a reservation-recording information input via a reservation-recording key of a mobile terminal (see paragraph 0257); and an event timer configured to store the reservation-recording information and perform reservation-recording at a

preset reservation time based on the reservation-recording information (see paragraph 0257).

Regarding claim37, Kunii anticipates the recording apparatus of claim 36, wherein the event timer turns on power of the recording apparatus at the preset reservation time based on the reservation- recording information (see paragraph0257).

Regarding claim38, Kunii anticipates the recording apparatus of claim 36, wherein the event timer comprises a non-volatile memory (see figure 7).

Regarding claim1, the method of claim34, comprising: downloading program information before storing the broadcast program information in the mobile terminal (see paragraph 0127, downloading TV program information); converting the stored broadcasting program information in to data information to be displayed on a screen of the mobile terminal and the outputting the data information to the screen ( see figure25 and paragraph 0235); and performing the reservation-recording by receiving a user's input via the reservation-recording key of the mobile terminal based on the searched broadcasting program information (see paragraph 0127).

Regarding claim2, the method of claim1, wherein performing the reservation-recording includes transmitting the reservation-recording information to an event timer of the recording apparatus in response to the input of the reservation-recording key (see paragraph 0281-0291); and storing the transmitted reservation-recording

information in the event timer of the recording apparatus, operating the event timer eraat a preset reservation time based on the reservation-recording information thereby turning on a power of the recording apparatus, and performing-a the reservationrecording (see paragraph 0281-091).

Regarding claim3, Kunii anticipates the method of claim 1, wherein in performing the reservation-recording, the broadcasting program information selected by a user among the displayed broadcasting program information is wirelessly transmitted to the record apparatus (see page17 paragraph 0291).

Regarding claim4, Kunii anticipates the method of claim 1, wherein in downloading the broadcasting program information and storing, the broadcasting program information is downloaded through a broadcasting program data service provider's Internet homepage (see page10 paragraph 0177).

Regarding claim5, Kunii anticipates the method of claim 1, wherein in downloading the broadcasting program information and storing, the broadcasting program information is directly downloaded from a broadcasting receiver where broadcasting program information is stored (see page11 paragraph 0190).

Regarding claim6, Kunii anticipates the method of Claim 1, wherein in outputting the data information to the screen, icons are generated on the basis of the stored

broadcasting program information and displayed on the screen (see figure 23-25 and page 2 paragraph 0038).

Regarding claim7, Kunii anticipates the method of claim 6, wherein if one of the displayed icons is selected, broadcasting channel information, broadcasting time information, and broadcasting program information according to each channel and time are displayed in a list form (see figure 25).

Regarding claim8, Kunii anticipates the method of claim 7, wherein in performing the reservation-recording, when a user selects an arbitrary broadcasting program, broadcasting channel information and broadcasting time information corresponding to a title of the selected broadcasting program are displayed enlarged (seefigure29), and a guide message inquiring whether the information is to be set as the reservation recording information is displayed (see figure 37).

Regarding claim9, Kunii anticipates the method of claim 1, wherein in providing for searching of the broadcasting program information, if an electric program guide (EPG) is provided as the broadcasting program information, a channel is set by inputting an up/down key of the mobile terminal when the channel inside the EPG is highlighted (see figure 29).

Regarding claim10, Kunii anticipates the method of claim 9, wherein in providing for searching of the broadcasting program information, a software channel management

for the broadcasting program information is provided to the mobile terminal to compare a channel set by a user with channel information of the program guide and to perform a channel search among substantial active channels (see page10 paragraph 0181).

Regarding claim11, Kunii anticipates the method of claim 1, wherein the mobile terminal downloads broadcasting program information through a broadcasting receiver that receives broadcasting program information, stores the broadcast program information in a memory, and performs a search and the reservation-recording of the broadcasting program information (see page7 paragraph 0127).

Regarding claim12, Kunii anticipates the method of claim 1, wherein the mobile terminal accesses to a wireless Internet network through a mobile communication module to download a broadcasting program from a broadcasting program service provider's Internet homepage and store the program in a memory, and then performs a search and the reservation-recording of the program (see Page10 paragraph 0177 and page14 paragraph 0242-0244).

Regarding claim13, Kunii anticipates the method of claim35, further comprising: transmitting the packetted reservation-recording information to a subscriber's server through a wireless Internet network (see page17 paragraph 0288)

Regarding claim15, Kunii anticipates the method of claim 13, wherein in performing the reservation-recording, the reservation-recording information is stored by an event timer including a non-volatile memory, a power of the recording apparatus is turned on at a preset reservation time of the broadcasting program on the basis of the reservation- recording information, and a reservation-record is performed (see page14 paragraph 0242-0244 and figure39 element 363).

Regarding claim 16, Kunii anticipates the method of claim 13, wherein the transmission packet includes a packet header that informs of a data content, a subscriber's code that informs of subscriber's information, the reservation-recording information, and the subscriber's IP information(see page5 paragraph 0093).

Regarding claim17, Kunii anticipates the method of claim 16, wherein the reservation-rec0rding information includes channel information that performs the reservation-recording, time information regarding reservation start time and reservation finish time, and category information including a program list (see page14 paragraph 0242-0244).

Regarding claim 18, Kunii anticipates the method of claim 13, wherein the transmission packet includes a packet header that informs of a data content, the subscriber's mobile terminal information, the reservation-recording information, and

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modem information when the recording apparatus is connected to the Internet by a telephone wire (see page5 paragraph 0093).

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Regarding claim 19, a broadcasting program reservation-recording system using mobile terminal, the system comprising: a CDMA module provided with a mobile communication module that receives broadcasting program information (see figure1 paragraph 0080); a remote communication controller that exchanges data with a recording apparatus or performs a wireless communication in order to control the recording apparatus (see paragraph 0125); a storage device that stores broadcasting program information received through the CDMA module and control data for the recording apparatus received by the remote communication controller (see paragraph 0127); a controller that converts the broadcasting program information stored in the storage device into data information of a suitable form to be displayed and output (see figure 5 element 81); and a display device that displays data information regarding the broadcasting program information output from the controller on a screen (see figure 5 element 31), wherein the system is configured to transmit a reservationrecording information from the mobile terminal to the recording apparatus based on a reservation-recording key of the mobile terminal to perform power management of the recording apparatus and a reservation-recording in the recording apparatus based on the reservation-recording information (see paragraph 0257).

Regarding claim20, Kunii anticipates the system of claim 19 further comprising a key input device that receives a user selection of the data information displayed on the screen (see figure5 element 32 and 48).

Regarding claim21, Kunii anticipates the system of claim 19, wherein the controller comprises: a CPU that generates icons for searching or controlling the broadcasting program information based on the data stored in the storage device and outputs the generated icons on the screen of the mobile terminal (see figure4 element 41); and a companion chip that controls an operation of the remote communication controller through an interface with the CPU (see figure4 element 22 and 64).

Regarding claim22, Kunii anticipates the system of claim 19, wherein the controller sets an arbitrary broadcasting program selected by a user among the broadcasting program information displayed on the display device in the recording apparatus as the reservation-recording information (see figure 29 and 39).

Regarding claim23, Kunii anticipates the system of claim 21, wherein the remote communication controller comprises: a remote control module that outputs a remote control signal in response to a remote control command for the recording apparatus provided from the companion chip connected to the CPU (see page6 paragraph0120); and a transmitter/receiver that performs a wireless data communication link with the

recording apparatus by receiving the remote control signal from the remote control module (see page6 paragraph0120).

Regarding Claim24, Kunii anticipates the system of claim 23, wherein the transmitter/receiver comprises: an infrared transmitter and an infrared receiver (IR transmitter/receiver) for that provides an infrared wireless data communication link; and a radio frequency data communication link (RF transmitter/receiver) that provides a high frequency wireless data communication link (see figure 5 element 22, 53 and 64).

Regarding claim25, Kunii anticipates the system of claim 19, wherein the display device comprises: video controller (see figure5 element 87); an audio codec (see page6 paragraph 0121); a liquid crystal display (LCD) screen (see page6 paragraph 0117); a speaker and a microphone (see figure5 element 50).

Regarding claim26, Kunii anticipates a broadcasting program reservationrecording system using a mobile terminal ,the system comprising: a service center that
provides broadcasting program information (see figure1 element 14 and figure10); a
mobile terminal that allows for searching of a broadcasting program by downloading
broadcasting program information from the service center and that transmits a
reservation-recording information from the mobile terminal to a recording apparatus
based on a reservation-recording key of the mobile terminal to perform power
management of the recording apparatus and a reservation-recording in the recording

apparatus based on the reservation-recording information (see paragraph 0127; 0257); and the recording apparatus that reservation-records the broadcasting program provided from the Service center based on the output reservation- recording information received fro the mobile terminal (see page17 paragraph 0291).

Regarding claim27, Kunii anticipates the system of claim 26 further comprising a mobile communication station that provides a wireless communication device between the service center and the mobile terminal (see figure1 element 2).

Regarding claim28, Kunii anticipates the system of claim 26, wherein the service center includes information of the mobile terminal and Internet access information of the recording Apparatus (see page5 paragraph 0093).

Regarding claim29, the system of claim 28, wherein the internet access information includes IP address information of the recording apparatus when the recording apparatus is connected to the Internet by an Ethernet, and includes telephone number information when the recording apparatus is connected to the internet by a telephone wire (see page5 paragraph 0093).

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim14, 30-33, 39-43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kunii et al (Pub. No. US 2002/0122080) as applied to claim1-13 and 15-29 above and further in view of Atkinson et al (Patent no US 6,760,850).

Regarding claim14, 30, 40, see the teaching of Kunii above. Kunii does not teach the recording apparatus is provided with a wakeup LAN module thus to turn on the recording apparatus at the time of a data communication request from outside. However Atkinson et al (hereinafter Atkins0n) teaches using wakeup LAN to turn on/off power of a device (see figure3 and column7 line 35-53).

One of ordinary skill in the art at the time the invention was made would have been motivated to use wakeup on LAN as in Atkinson in to Kunii system because it would allow the recording device to save power by keeping it off when it is not in use.

Regarding claim31, 41, Atkinson teaches the system of claim 30, wherein the wakeup LAN module comprises: a system bios device including control information that controls a power of the recording apparatus (see column7 line 4-12); a physical layer unit for performing an interface with the system bios unit in response to the data communication request from outside (see figure3 element 218); and a backup battery

for providing a power to the physical layer unit and the system bios unit (see figure 3 element 318).

Regarding claim32, 42, Atkinson teaches the system of claim 31 further comprising a power controller that turns on/off power of the recording apparatus based on the power control information of the system bios device (see figure3 element 304 and 322).

Regarding claim33, 39, 43, Atkinson teaches the system of claim 31, wherein the system bios device includes a power management logic device that stands by with an operation-enable state by receiving a minimum power from the backup battery (see column7 line 63-67).

Therefore, the invention as a whole would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, absent unexpected results to the contrary.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Huang (US 6,437,836) Mineyana (US 7,143,429) Kim (US 2003/0159146)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GIRUMSEW WENDMAGEGN whose telephone number is (571)270-1118. The examiner can normally be reached on 7:30-5:00, M-F, alr Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tran Thai can be reached on (571)272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Girumsew Wendmagegn/ Examiner, Art Unit 2621

/Thai Tran/

Supervisory Patent Examiner, Art Unit 2621

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